Claims

1.   A method (900) for processing image or video data
for a display, the method comprising the step of:
5   separating (905, 925) a stream of image or video
data into a block of pixels, wherein each pixel within
the block of pixels comprises a first sequence of pixel
bit values for a colour component of said image or video
and one or more bits to be discarded (730);
10   the method characterised by the steps of:
            determining (950, 960), for the block of pixels, a
binary value of said one or more bits to be discarded
(730); and
            modifying (955, 965) said first sequence of pixel
15   bit values as a block of pixels in response to said
determined binary value to form a reduced number of pixel
bit values to represent said colour component of a pixel
within the block of pixels.

20   2.   The method (900) for processing image or video
data for a display according to Claim 1, the method
further characterised by the step of:
            determining an average colour component for one
or more colours of said block of pixels (930), wherein a
25   number of said first sequence of pixel bit values
represents a number of respective baseline colour
component values of a pixel (935).

3.   The method (900) for processing image or video
30   data for a display according to Claim 2, wherein the step
of determining an average colour component (930) includes
the step of:

adding a number of colour components from a block
of pixel data from said stream of image or video data to
form a colour component pixel value; and

dividing said colour component pixel value by the
5   number of pixels to provide an average colour component
value.

4.   The method (900) for processing image or video
data for a display according to Claim 2 or Claim 3, the
10 method further characterised by the step of:

truncating said average colour component value
(920) by discarding one or more lesser significant bits
(950, 960) to obtain a reduced number of bits forming
said first sequence of pixel bit values for pixels within
15 a block.

5.   The method (900) for processing image or video
data for a display according to Claim 1, wherein the step
of modifying (955, 965) includes modifying a bit of
20 higher significance within said first sequence of pixel
bit values with one or more discarded (730) bits of
lesser significance.

6.   The method (900) for processing image or video
25 data for a display according to Claim 1, wherein said
step of determining (950, 960) a binary value of said one
or more bits to be discarded (730) includes determining
an offset for said respective colour component based on
said one or more bits to be discarded (730), where said
30 offset is used to determine the number of pixels within
the block for which the baseline value of that colour
component are to be modified.

7.   The method (900) for processing image or video
data for a display according to Claim 6, the method
further characterised by the step of:
        dividing the offset value by a multiple of the
5   number of bits to be discarded (730) to indicate the
number of pixels within the block for which a correction
value is to be added to the baseline value of that colour
component.

10 8.   The method (900) for processing image or video
data for a display according to Claim 1, the method
further characterised by the step of:
        omitting said step of modifying when said first
sequence of pixel bit values comprises a series of binary
15 '1's, to avoid a bit-rollover when modifying said first
sequence of pixel bit values.

9.   The method (900) for processing image or video
data for a display according to Claim 1, the method
20 further characterised by the steps of:
        determining a level of image detail in an image
area of said stream of image or video data; and
        applying said steps of determining a binary value
of said one or more bits to be discarded (730) and
25 modifying said first sequence of pixel bit values in
response to determining a low level of image detail.

10.   The method (900) for processing image or video
data for a display according to Claim 9, wherein said
30 step of determining a level of image detail includes
determining a luminance value (910) for a number of
pixels within a block of pixels, such that if the
luminance value is below a threshold (915) then the block

of pixels are determined as residing within a low level
of image detail.

11.   An image or video processing system, adapted to
5   perform the method steps of any of Claims 1 to 10.

12.   A display driver (111) for refreshing an image of
a display device, wherein the display driver (111) is
adapted to perform the method steps of Claim 1.
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13.   A storage medium storing processor-implementable
instructions for controlling one or more processors to
carry out the method of Claim 1.

15   14.   An image or video communication device (100)
having a display (110) adapted to perform the method
steps of Claim 1.

15.   A image or video communication device (100), the
20   device comprising:
           a display (110) for displaying an image;
           a processor (108), operably coupled to said
display (110), for processing said image to be displayed
wherein said processor is configured to separate a stream
25   of image or video data into a block of pixels, wherein
each pixel within the block of pixels comprises a first
sequence of pixel bit values for a colour component of
said image or video and one or more bits to be discarded
(730), characterised in that the processor (108)
30   determines a binary value of said one or more bits to be
discarded (730) for the block of pixels, and modifies as
a block of pixels said first sequence of pixel bit values
based on the binary value to form a reduced number of bit

values that represent said colour component of a pixel
within the block of pixels.

16.   The image or video communication device (100)
according to Claim 14 or Claim 15, wherein the image or
video communication device (100) device is one of:

    a cellular phone, a portable or mobile radio, a
personal digital assistant, a laptop computer, a
wirelessly networked PC.